



Dear _____, Class _____

We are pleased to see that you are planning to participate in the Southeast School Science Fair and Invention Convention. Attached to this letter you will find guidelines and suggestions for your project. Show this packet to your parents and anyone who will be helping you with your science project.

As a first step, please fill out and return the 'Description of Project' form attached to this notice. Completing this form will help you organize the project you would like to create. You can choose to profile a scientist or describe a theory for your project instead of an experiment. If you do that, use the alternative form in this packet. Either way, try to complete a plan ahead of time and show your plan to Mrs. Irvine.

Projects should be brought to Southeast on **March 8th** by 9:00 a.m. If you have any questions ask your teacher or Mrs. Irvine*. We would be glad to help. Have Fun!

Note:

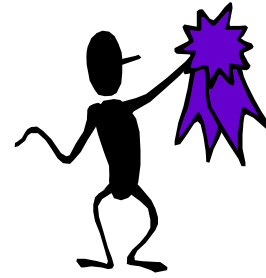
These packets and other resources are available from the Southeast School Webpage:

www.mansfieldct.gov/southeast

Click on the Science Fair & Invention Convention link under Southeast News and Announcements.

*Mrs. Irvine's email address is irvinesb@mansfieldct.org or call 860-423-1611 ext 7622

Southeast School Science Fair & Invention Convention
Southeast School All-Purpose Room
Wednesday, March 8, 2017
6:30-7:30 P.M.



- All projects must be brought to the Southeast All-Purpose Room on **March 8th** by **9:00 a.m.** Projects need to be at school in the morning so the classes can visit the displays during the morning/afternoon of **March 8th**. Families return at night for the Science Fair and Invention Convention from 6:30-7:30 p.m.
- We request that parents inform the school* of any project that needs to be monitored by an adult (due to delicate equipment, electrical current etc.). Parents should consider doing this in advance, if possible or at least before leaving the project on the morning of **March 8th**. We want to be sure that students who tour the event during the day do not damage equipment or injure themselves.
- All projects should be taken home after the evening Science Fair and Invention Convention. Please contact Mrs. Irvine* if you are not able to take your project home that evening so that other arrangements can be made.
- Students participating in the SCIENCE FAIR are encouraged to bring a completed 'Description of Project' form with their project.
- Exhibits should be free-standing so that they can be displayed on any table.
- Titles and student names should be clear, large, and neat.
- Charts and pictures should have a clear explanation.
- Don't forget to practice your presentation. Students, teachers, judges and parents are interested to hear what you did and how you did it.
- Students are asked to stay with their projects on the night of the Science Fair and Invention Convention. All students will have visited the displays during the school day.
- No dangerous chemicals or open flames may be displayed.
- Remember that science projects are for display, only inventions will be judged in a competition.
- All participants will receive a certificate of participation.
- Please let us know if you need any special arrangements. We may be able to arrange for your project to be close to a sink or electrical outlet if we receive such a request before the event. We also can make arrangements for projects to be picked up the next day, for example.

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PARENTS: We hope you use this project as an opportunity to work with your child and have an enjoyable time learning about science. What could you do?

DO AN EXPERIMENT; DEMONSTRATE A SCIENTIFIC PRINCIPLE; CONDUCT RESEARCH; SHARE A COLLECTION; EXPLAIN A TOOL/APPARATUS; PROFILE AN IMPORTANT SCIENTIST

One way to create a project is:

1. Ask a question.
2. Plan and conduct a simple investigation.
3. Employ simple equipment and tools to gather data and extend the senses.
4. Use data to construct a reasonable explanation
5. Communicate investigations and explanations

PARENTS AS FACILITATORS FOR YOUNG SCIENTISTS

1. Brainstorm science fair topics with your child. Have your child select the one that most interests him or her.
2. Aid in focusing the research question or topic. Keep it simple.
3. Check the research plan:

Is it safe?	Is there a comparison group?
Are animals being used properly?	Are observations being recorded accurately?
4. Help your child find resources. Check the library or school for books, and local businesses for other resources.
5. Facilitate the student's project. In other words, work together but let the student do most of the work. Your main role may be just to encourage the student throughout the project.
6. Talk with your child about ideas and findings. Remind your child that just because it doesn't work, that doesn't mean it's a failure. Have your child explain what she learned from the unexpected result.
7. Remind the student about the value of their findings. This is their research and the presentation of their findings is an important part of science.

UNDERSTANDING ABOUT SCIENTIFIC INQUIRY—For Older Students

- Scientific investigations involve asking and answering a question and comparing the answer to what scientists already know about the world.
- Scientists use different kinds of investigations depending on the questions they are trying to answer. Types of investigations include:
 - describing objects
 - events and organisms
 - classifying
 - doing a fair test, an experiment
- Simple instruments, like magnifiers, thermometers, and rulers, provide more information than scientists obtain using only their senses.
- Scientists develop explanations using observations (evidence) and what they already know about the world (scientific knowledge). Good explanations are based on evidence from investigations.
- Scientists make the results of their investigations public; they describe the investigations in ways that enable others to repeat the investigation.
- Scientists review and ask questions about the results of other scientists' work.

Description of Project
This information should also go on your poster board.

Name: _____

Grade: _____ Teacher: _____

To help you correctly follow the scientific method when you do a science experiment, you should organize your project as follows:

PROBLEM: (State the problem that you are trying to solve with your experiment)

MATERIALS: (What materials did you use?)

METHODS : (Describe your experiment)

RESULTS: (What were your observations? What were the results of your experiment?)

CONCLUSIONS: (What are your conclusions? Have you answered the problem? Did you find any difficulties that made it hard to reach any definite conclusions? Do your results and conclusions suggest other experiments you might do in the future?)

Alternate Project Description
This information should also go on your poster board.

Name: _____

Grade: _____ Teacher: _____

As an **alternative** to doing a science experiment, some students choose to explain something in science or interview a scientist. Here are some guidelines for this kind of project.

AREA OF STUDY (State the specific area of science you/your scientist are studying)

SIMPLE EXPLANATION (Explain this area of science in an easy to understand way)

MODELS : (Find a way to show this area of science)

CONCLUSIONS: (Sum up what you learned about science. What are some questions that still need to be answered? What research is on-going in this area? How will this area of science benefit us in the future?)

Science Fair Judging Rubric

<i>Student's Name:</i>		<i>Title:</i>		<i>Total Points:</i>	
I. Scientific Procedure	Impressive		Adequate		Minimal
Clear and Specific Question	4	3	2	1	0
Clear and Specific Hypothesis	4	3	2	1	0
Complete and Thorough Method (step by step)	4	3	2	1	0
Complete and Thorough Data (logs, graphs, tables, photos)	4	3	2	1	0
Conclusion supported by Data	4	3	2	1	0
Conclusion Relevant to Hypothesis	4	3	2	1	0
II. Originality					
Original Topic or Approach	4	3	2	1	0
III. Simplicity					
Appropriate Materials and Construction	4	3	2	1	0
Clarity of Overall Project	4	3	2	1	0
Comments:					